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10/656,525

09/05/2003

Lee B. Barton

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EXAMINER

MORRISON, JAY A

ART UNIT

PAPER NUMBER

2168

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,525

Applicant(s)

BARTON ET AL.

Examiner

Jay A. Morrison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-51 and 53-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-51 and 53-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. Claims 1,3-51,53-65 are pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 39-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Oracle 9i Database Documentation (Release 2 [9.2], March 2002) ('Oracle' hereinafter).

As per claim 39, Oracle teaches

"obtaining metadata for the object type and using the metadata to make a determination of the composition of the objects of the type" (metadata views, page B-9, table B-3, Oracle 9i SQL Reference);

"selecting a transfer technique for objects belonging to the type from a plurality thereof according to the determination" (SELECT, page 18-4, Oracle 9i SQL Reference);

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“and transferring the objects belonging to the type according to the selected transfer technique” (SELECT, page 18-4, Oracle 9i SQL Reference).

As per claim 40, Oracle teaches

“in the step of transferring, the objects are transferred in parallel” (parallel_clause, page 7-49, Oracle 9i SQL Reference).

As per claim 41, Oracle teaches

“receiving a value that specifies a degree of parallelism, the objects being transferred in parallel as determined by the degree of parallelism” (integer indicates degree of parallelism, page 7-51, Oracle 9i SQL Reference).

As per claim 42, Oracle teaches

“the transfer technique for certain of the objects permits transfer of portions of the contents of the object in parallel” (parallel_clause, page 7-49, Oracle 9i SQL Reference);

“and in the step of transferring the certain objects, the portions are transferred in parallel” (parallel_clause, page 7-49, Oracle 9i SQL Reference).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1,3-15,23-36,43,50-51,53-55,58-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oracle 9i Database Documentation (Release 2 [9.2], March 2002) ('Oracle' hereinafter) in view of Basko et al. ('Basko' hereinafter) (Patent Number 6,993,529).

As per claim 1, Oracle teaches

"a transfer mechanism that transfers database objects" (data transfers, page 2-40, Oracle-Supplied Types section, Oracle 9i SQL Reference);

“and a ... control database object that represents the job, the transfer mechanism operating under control of the control database object to transfer the objects in the set” (CREATE PROCEDURE, page 14-62, Oracle 9i SQL Reference).

Oracle does not explicitly indicate “queryable ... and specifies the set of objects”.

However, Basko discloses “queryable ... and specifies the set of objects” (metadata is stored in tables, column 10, lines 31-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Oracle and Basko because using the steps of “queryable ... and specifies the set of objects” would have given those skilled in the art the tools to improve the invention by allowing inquiries into available data sources when deciding how to implement access. This gives the user the advantage of having dynamic access and control of resources.

As per claim 3, Oracle teaches

“the control database object further specifies an order in which the transfer mechanism transfers the objects in the set” (ORDER BY, page 18-9, Oracle 9i SQL Reference).

As per claim 4, Oracle teaches

“the order orders the objects in the set” (ORDER BY, page 18-9, Oracle 9i SQL Reference) “by size” (VSIZE, page 6-204, Oracle 9i SQL Reference).

As per claim 5, Oracle teaches

“the control database object includes a filter that further specifies the set of objects” (WHERE, page 18-5, Oracle 9i SQL Reference).

As per claim 6, Oracle teaches

“the transfer mechanism further performs an operation on one or more objects belonging to the set” (page 18-6, Oracle 9i SQL Reference);

“and the control database object includes a specification of the operation” (page 18-6, Oracle 9i SQL Reference).

As per claim 7, Oracle teaches

“the operation is an operation that transforms the object” (examples, page 18-27 through 18-30, Oracle 9i SQL Reference).

As per claim 8, Oracle teaches

“the operation is an operation that remaps a name in the object to a different name” (expr AS c_alias, page 18-6, Oracle 9i SQL Reference; example SELECT department_id AS d_e_dept_id, page 18-38, Oracle 9i SQL Reference).

As per claim 9, Oracle teaches

“the control database object includes a specification of a status of the job; and the transfer mechanism updates the status in the specification during the transfer” (datafile status, page 2-3, Oracle 9i User-Managed backup and Recovery Guide).

As per claim 10, Oracle teaches

“the control database object is queryable to obtain a current status of the job from the specification of the status” (query the view, page 2-3, Oracle 9i User-Managed backup and Recovery Guide).

As per claim 11, Oracle teaches

“the transfer mechanism employs the specification of the status of the job”(query the view, page 2-3, Oracle 9i User-Managed backup and Recovery Guide) “to restart the job after the job has been stopped” (resume where it left off, page 4-34, Oracle 9i User-Managed backup and Recovery Guide).

As per claim 12, Oracle teaches

“the control database object specifies a remote database management system as a source of the set of objects” (SELECT and external tables, page 17-48, table 17-4, Oracle 9i SQL Reference);

“and the transfer mechanism fetches the set of objects from the remote database management system” (external table, SELECT, page 17-48, table 17-4, Oracle 9i SQL

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Reference).

As per claim 13, Oracle teaches

“the control database object specifies the database management system as a destination of the set of database objects” (remote output table, page 17-26, Oracle 9i SQL Reference);

“and the transfer mechanism further fetches the set of database objects into the database management system” (SELECT, page 18-4, Oracle 9i SQL Reference).

As per claim 14, Oracle teaches

“the control database object specifies a set of files in the database system as a source or destination of the set of database objects” (page 17-48, table 17-4, Oracle 9i SQL Reference).

As per claim 15, Oracle teaches

“when the set of files is the source of the set of database objects, the set of files is the result of a job and includes a copy of the control database object for the job” (schema objects, stored procedure, pages 2-107 through 2-108, Oracle 9i SQL Reference).

As per claim 23, Oracle teaches

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"the control database object further specifies a template whereby the transfer mechanism may add a file to the set of files when required for transferring the objects" (add a file, page 13-28, SQL Reference).

As per claim 24, Oracle teaches

"the control database object specifies a remote database management system as a source of the set of objects" (SELECT and external tables, page 17-48, table 17-4, Oracle 9i SQL Reference) "and a set of files in the database system as a destination therefor" (DATAFILE specifies datafile or files, pages 15-83 through 15-84, Oracle 9i SQL Reference);

"and the transfer mechanism transfers the set of objects from the remote database management system to the set of files" (tablespace, page 9-29, Oracle 9i SQL Reference).

As per claim 25, Oracle teaches

"the control database object specifies a set of files in the database system as a source of the set of objects" (datafile, page 9-29, Oracle 9i SQL Reference);

"and the transfer mechanism transfers the set of objects from the set of files into the database management system" (tablespace, page 9-29, Oracle 9i SQL Reference).

As per claim 26, Oracle teaches

"the transfer mechanism further provides an interface whereby an entity that uses the transfer mechanism may interact with the job" (SQL*Plus SQL prompt, page 2-2, Oracle 9i User-Managed Backup and Recovery Guide).

As per claim 27, Oracle teaches

"the interface permits the entity to attach to and detach from the job for as long as the job's control database object exists, transfer of the objects by the transfer mechanism being unaffected by detachment of the entity from the job" (SQL*Plus SQL prompt, page 2-2, Oracle 9i User-Managed Backup and Recovery Guide).

As per claim 28, Oracle teaches

"the entity may use the interface via a network connection to the database management system" (access the remote database, first paragraph, page 2-120, Oracle 9i SQL Reference).

As per claim 29, Oracle teaches

"the interface includes a defining interface whereby the entity may define a portion of the job's control database object" (SQL*Plus SQL prompt, page 2-2, Oracle 9i User-Managed Backup and Recovery Guide).

As per claim 30, Oracle teaches

“the interface includes an executing interface whereby the entity may interact with the transfer mechanism from the time the transfer mechanism begins transferring the objects in the set until the job's control database object ceases to exist” (SQL*Plus SQL prompt, page 2-2, Oracle 9i User-Managed Backup and Recovery Guide).

As per claim 31, Oracle teaches

“the entity may use the executing interface to obtain a current status of the job from a specification of the status of the job in the control database object” (page 2-3, Determining Datafile Status for Online Tablespace Backups section, Oracle 9i User-Managed Backup and Recovery Guide).

As per claim 32, Oracle teaches

“the entity may use the executing interface to stop performance of the job by the transfer mechanism or the transfer mechanism may stop performance of the job in response to an error” (interactively stop, page 1-14, second paragraph, Oracle 9i Backup and Recovery Concepts).

As per claim 33, Oracle teaches

“the entity may use the executing interface to restart a stopped job, the transfer mechanism using a specification of the status of the job in the control database object to restart the job” (interactively start or stop, page 1-14, second paragraph, Oracle 9i Backup and Recovery Concepts).

As per claim 34, Oracle teaches

“the entity may use the executing interface to affect allocation of resources by the transfer mechanism to the job” (threads parameter, page 3-8, Oracle 9i, SQL*Plus Users Guide and Reference).

As per claim 35, Oracle teaches

“the transfer mechanism operates on objects in the set in parallel”
(parallel_clause, page 7-49, Oracle 9i SQL Reference);

“and the entity uses the executing interface to specify a maximum degree of parallelism for the job” (integer indicates degree of parallelism, page 7-51, Oracle 9i SQL Reference).

As per claim 36, Oracle teaches

“at least one file containing the objects belonging to the set thereof” (external table, page 15-8, Oracle 9i SQL Reference);

Oracle does not explicitly indicate “and a control object in the set thereof that specifies for each object belonging to the set the location of the object in the set of files and an order in which the database management system transfers the object during the transfer”.

However, Basko discloses “and a control object in the set thereof that specifies for each object belonging to the set the location of the object in the set of files and an

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order in which the database management system transfers the object during the transfer” (metadata is stored in tables, column 10, lines 31-59; data flow diagram imports order in which objects are transferred, column 6, lines 31-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Oracle and Basko because using the steps of “and a control object in the set thereof that specifies for each object belonging to the set the location of the object in the set of files and an order in which the database management system transfers the object during the transfer” would have given those skilled in the art the tools to improve the invention by allowing inquiries into available data sources when deciding how to implement access. This gives the user the advantage of having dynamic access and control of resources.

As per claim 43, Oracle teaches

“and executing the job by causing the transfer mechanism to transfer the set of database objects under control of the job's control data base object” (data transfers, page 2-40, Oracle-Supplied Types section, Oracle 9i SQL Reference).

Oracle does not explicitly indicate “defining a queryable control database object that represents the job and specifies the set of objects”.

However, Basko discloses “defining a queryable control database object that represents the job and specifies the set of objects” (metadata is stored in tables, column 10, lines 31-59).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Oracle and Basko because using the steps of "defining a queryable control database object that represents the job and specifies the set of objects" would have given those skilled in the art the tools to improve the invention by allowing inquiries into available data sources when deciding how to implement access. This gives the user the advantage of having dynamic access and control of resources.

As per claim 50, Oracle teaches

"the step of defining the job includes the step of creating the job's control database object" (CREATE PROCEDURE, page 14-62, Oracle 9i SQL Reference).

As per claim 51, Oracle teaches

"the step of defining the job includes the step of specifying a source and/or destination for the set of database objects in the job's control database object" (FROM, page 18-5, Oracle 9i SQL Reference).

As per claim 53, Oracle teaches

"the step of defining the job includes the step of specifying a filter in the job's control database object, the filter defining a subset of the specified set of database objects as the set of objects to be transferred in the job" (WHERE, page 18-5, Oracle 9i SQL Reference).

As per claim 54, Oracle teaches

“the step of defining the job includes the step of specifying an operation in the job's control database object that is to be performed on one or more objects in the set” (SELECT, page 18-5, Oracle 9i SQL Reference).

As per claim 55, Oracle teaches

“the step of defining the job includes the step of defining a parameter for the job in the job's control database object for the job” (examples, page 18-27 through 18-30, Oracle 9i SQL Reference).

As per claim 58, Oracle teaches

“the control database object includes a specification of one or more parameters for the job, the transfer mechanism transferring the objects in the set as specified by the parameter” (page 18-27 through 18-30, Oracle 9i SQL Reference).

As per claim 59,

Oracle does not explicitly indicate “the parameter is an estimate only parameter, the transfer mechanism responding thereto by providing an estimate of the space required for the objects in the set without transferring the objects”.

However, Basko discloses “the parameter is an estimate only parameter, the transfer mechanism responding thereto by providing an estimate of the space required for the objects in the set without transferring the objects” (column 9, lines 5-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Oracle and Basko because using the steps of “the parameter is an estimate only parameter, the transfer mechanism responding thereto by providing an estimate of the space required for the objects in the set without transferring the objects” would have given those skilled in the art the tools to improve the invention by allowing space requirements to be checked before a transfer. This gives the user the advantage of not starting a transfer that cannot complete.

As per claim 60,

Oracle does not explicitly indicate “the control database object is a table and includes rows representing the objects belonging to the set of database objects”.

However, Basko discloses “the control database object is a table and includes rows representing the objects belonging to the set of database objects” (column 10, lines 31-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Oracle and Basko because using the steps of “the control database object is a table and includes rows representing the objects belonging to the set of database objects” would have given those skilled in the art the tools to improve the invention by having an object which is easily stored in the database format. This gives the user the advantage of having a standardized format.

As per claim 61,

Oracle does not explicitly indicate “the row representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects”.

However, Basko discloses “the row representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects” (column 10, lines 31-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Oracle and Basko because using the steps of “the row representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects” would have given those skilled in the art the tools to improve the invention by allowing a more detailed timeline of transfers to be developed. This gives the user the advantage of being sure that object relationships are not altered.

As per claim 62,

Oracle does not explicitly indicate “the data storage device contains code which, when executed by a processor, implements the apparatus set forth in claim 1”.

However, Basko discloses “the data storage device contains code which, when executed by a processor, implements the apparatus set forth in claim 1” (column 3, line 60 through column 4, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Oracle and Basko because using the steps of “the data

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storage device contains code which, when executed by a processor, implements the apparatus set forth in claim 1" would have given those skilled in the art the tools to improve the invention by allowing the program to be stored for future use. This gives the user the advantage of having a non-volatile copy of the resource.

As per claim 63,

Oracle does not explicitly indicate "the data storage device contains the set of files set forth in claim 36".

However, Basko discloses "the data storage device contains the set of files set forth in claim 36" (column 6, lines 20-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Oracle and Basko because using the steps of "the data storage device contains the set of files set forth in claim 36" would have given those skilled in the art the tools to improve the invention by allowing the program to be stored for future use. This gives the user the advantage of having a non-volatile copy of the resource.

As per claim 64,

Oracle does not explicitly indicate "the data storage device contains code which, when executed by a processor, implements the method set forth in claim 39"

However, Basko discloses “the data storage device contains code which, when executed by a processor, implements the method set forth in claim 39”. (column 3, line 60 through column 4, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Oracle and Basko because using the steps of “the data storage device contains code which, when executed by a processor, implements the method set forth in claim 39” would have given those skilled in the art the tools to improve the invention by allowing the program to be stored for future use. This gives the user the advantage of having a non-volatile copy of the resource.

As per claim 65,

Oracle does not explicitly indicate “the data storage device contains code which, when executed by a processor, implements the method set forth in claim 43”

However, Basko discloses “the data storage device contains code which, when executed by a processor, implements the method set forth in claim 43”. (column 3, line 60 through column 4, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Oracle and Basko because using the steps of “the data storage device contains code which, when executed by a processor, implements the method set forth in claim 43” would have given those skilled in the art the tools to improve the invention by allowing the program to be stored for future use. This gives the user the advantage of having a non-volatile copy of the resource.

4. Claims 16-22,37-38,44-49,56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oracle 9i Database Documentation (Release 2 [9.2], March 2002) ('Oracle' hereinafter) in view of Basko et al. ('Basko' hereinafter) (Patent Number 6,993,529) and further in view of Rivlin (Patent Number 6,032,159).

As per claim 16,

Oracle does not explicitly indicate "the control database object is a table and includes rows representing objects belonging to the set of database objects".

However, Rivlin discloses "the control database object is a table and includes rows representing objects belonging to the set of objects" (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of "the control database object is a table and includes rows representing objects belonging to the set of objects" would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 17,

Oracle does not explicitly indicate "each row representing an object belonging to the set includes a specification of an order in which the object represented by the row was transferred to the set of files relative to other objects belonging to the set".

However, Rivlin discloses “each row representing an object belonging to the set includes a specification of an order in which the object represented by the row was transferred to the set of files relative to other objects belonging to the set” (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of “each row representing an object belonging to the set includes a specification of an order in which the object represented by the row was transferred to the set of files relative to other objects belonging to the set” would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 18,

Oracle does not explicitly indicate “when the set of files is the destination of the set of database objects, there is a row representing each object that has been transferred to the set of files”.

However, Rivlin discloses “when the set of files is the destination of the set of database objects, there is a row representing each object that has been transferred to the set of files” (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of “when the set of files is the destination of the set of database objects, there is a row representing each object that has been

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transferred to the set of files” would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 19,

Oracle does not explicitly indicate “when the set of files is the source of the set of database objects, there is a row representing each object which is to be transferred into the database management system”.

However, Rivlin discloses “when the set of files is the source of the set of database objects, there is a row representing each object which is to be transferred into the database management system” (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of “when the set of files is the source of the set of database objects, there is a row representing each object which is to be transferred into the database management system” would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 20,

Oracle does not explicitly indicate “the row representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects”.

However, Rivlin discloses “the row representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects” (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of “the row representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects” would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 21,

Oracle does not explicitly indicate “the set of files is the result of a job and includes a copy of the control database object for the job, the copy having a row for each database object contained in the set of files; and when the transfer mechanism is transferring the objects belonging to the set of objects from the set of files into the database management system, the control database object contains a copy of at least the rows representing the objects from the copy of the control database object in the file set”.

However, Rivlin discloses “the set of files is the result of a job and includes a copy of the control database object for the job, the copy having a row for each database object contained in the set of files; and when the transfer mechanism is transferring the objects belonging to the set of objects from the set of files into the database

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management system, the control database object contains a copy of at least the rows representing the objects from the copy of the control database object in the file set” (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of “the set of files is the result of a job and includes a copy of the control database object for the job, the copy having a row for each database object contained in the set of files; and when the transfer mechanism is transferring the objects belonging to the set of objects from the set of files into the database management system, the control database object contains a copy of at least the rows representing the objects from the copy of the control database object in the file set” would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 22,

Oracle does not explicitly indicate “the row in the copied rows representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects represented by the copied rows”.

However, Rivlin discloses “the row in the copied rows representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects represented by the copied rows” (column 6, line 55 through column 7, line 10).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of “the row in the copied rows representing a particular object includes a field whose value specifies an order in which the object is to be transferred relative to the other objects represented by the copied rows” would have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 37,

Oracle does not explicitly indicate “the file further includes metadata that defines a type of database objects and one or more database objects that belong to the type defined by the metadata and the order determines that the metadata is processed before the database objects that belong to the type defined by the metadata”.

However, Rivlin discloses “the file further includes metadata that defines a type of database objects and one or more database objects that belong to the type defined by the metadata; and the order determines that the metadata is processed before the database objects that belong to the type defined by the metadata” (column 3, lines 9-42).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of “the file further includes metadata that defines a type of database objects and one or more database objects that belong to the type defined by the metadata; and the order determines that the metadata is processed before the database objects that belong to the type defined by the metadata” would

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have given those skilled in the art the tools to obtain speed benefits over previous methods. This gives the user the advantage of being able to copy specific objects in a set.

As per claim 38, Oracle teaches

"a header in each file of the set, the header including an indication the control object is contained in the file and if so, the location of the control object in the file and an identifier that identifies the file within the set" (page 7-8 and 7-9, Crosschecks of RMAN Backups and Copies section, Oracle 9i Recovery manager user's Guide);

"and the control object uses the identifier in specifying the location of the object in the set of files" (page 7-8 and 7-9, Crosschecks of RMAN Backups and Copies section, Oracle 9i Recovery Manager User's Guide).

As per claim 44,

Oracle does not explicitly indicate "the step performed in either the defining step or the executing step of: attaching to the job, attachment permitting at least reading and/or modification of the job's control database object".

However, Rivlin discloses "the step performed in either the defining step or the executing step of: attaching to the job, attachment permitting at least reading and/or modification of the job's control database object" (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of "the step performed in either the defining

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step or the executing step of: attaching to the job, attachment permitting at least reading and/or modification of the job's control database object" would have given those skilled in the art the tools to provide recoverable and consistent data in the case of a system failure. This gives the user the advantage of not risking losing time and data.

As per claim 45,

Oracle does not explicitly indicate "the step performed after the step of attaching to the job of: reading the job's control database object to get the job's current status".

However, Rivlin discloses "the step performed after the step of attaching to the job of: reading the job's control database object to get the job's current status" (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of "the step performed after the step of attaching to the job of: reading the job's control database object to get the job's current status" would have given those skilled in the art the tools to provide recoverable and consistent data in the case of a system failure. This gives the user the advantage of not risking losing time and data.

As per claim 46, Oracle discloses

"the transfer mechanism transfers the data objects in parallel and the method further comprises the step performed after the step of attaching to the job of: specifying

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a degree of parallelism with which the objects may be transferred" (page 7-49 through 7-51, Oracle 9i SQL Reference).

As per claim 47,

Oracle does not explicitly indicate "the step performed after the step of attaching to the job of: starting the step of executing the job".

However, Rivlin discloses "the step performed after the step of attaching to the job of: starting the step of executing the job" (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of "the step performed after the step of attaching to the job of: starting the step of executing the job" would have given those skilled in the art the tools to provide recoverable and consistent data in the case of a system failure. This gives the user the advantage of not risking losing time and data.

As per claim 48, Oracle teaches

"the step performed after attaching to the job of: stopping the step of executing the job" (recovery CANCEL, page 4-18 through 4-19, Oracle 9i User-Managed backup and Recovery Guide).

As per claim 49,

Oracle does not explicitly indicate "saving job state in the control database object such that the step of executing the job may be restarted from the job state".

However, Rivlin discloses “saving job state in the control database object such that the step of executing the job may be restarted from the job state” (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of “saving job state in the control database object such that the step of executing the job may be restarted from the job state” would have given those skilled in the art the tools to provide recoverable and consistent data in the case of a system failure. This gives the user the advantage of not risking losing time and data.

As per claim 56,

Oracle does not explicitly indicate “the step of executing the job includes the step performed when the step of executing the job must be stopped of: saving job state in the control database object such that the stopped executing step may be restarted from the job state”.

However, Rivlin discloses “the step of executing the job includes the step performed when the step of executing the job must be stopped of: saving job state in the control database object such that the stopped executing step may be restarted from the job state” (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of “the step of executing the job includes the step performed when the step of executing the job must be stopped of: saving job state

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in the control database object such that the stopped executing step may be restarted from the job state" would have given those skilled in the art the tools to provide recoverable and consistent data in the case of a system failure. This gives the user the advantage of not risking losing time and data.

As per claim 57,

Oracle does not explicitly indicate "the step of executing the job includes the step performed when the step of executing the job has been stopped of: using the job state to restart the stopped executing step".

However, Rivlin discloses "the step of executing the job includes the step performed when the step of executing the job has been stopped of: using the job state to restart the stopped executing step" (column 7, lines 25-58).

It would have been obvious to one of ordinary skill in the art to combine Oracle, Basko, and Rivlin because using the steps of "the step of executing the job includes the step performed when the step of executing the job has been stopped of: using the job state to restart the stopped executing step" would have given those skilled in the art the tools to provide recoverable and consistent data in the case of a system failure. This gives the user the advantage of not risking losing time and data.

Response to Arguments

Applicant's arguments with respect to claim 1,3-38,43-51,53-65 have been considered but are moot in view of the new ground(s) of rejection.

With regards to Applicant's argument that Oracle does not disclose selecting a transfer technique for objects belonging to the type, it is noted that Oracle discloses a SELECT statement (page 18-4), which is typically used by various clients when requesting objects from a database and the objects are transferred back to the client. It is also respectfully submitted that the metadata determines the composition of the objects drawn from the tables in the SELECT statement. Therefore Oracle discloses the limitation.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

The prior art made of record, listed on form PTO-892, and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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